

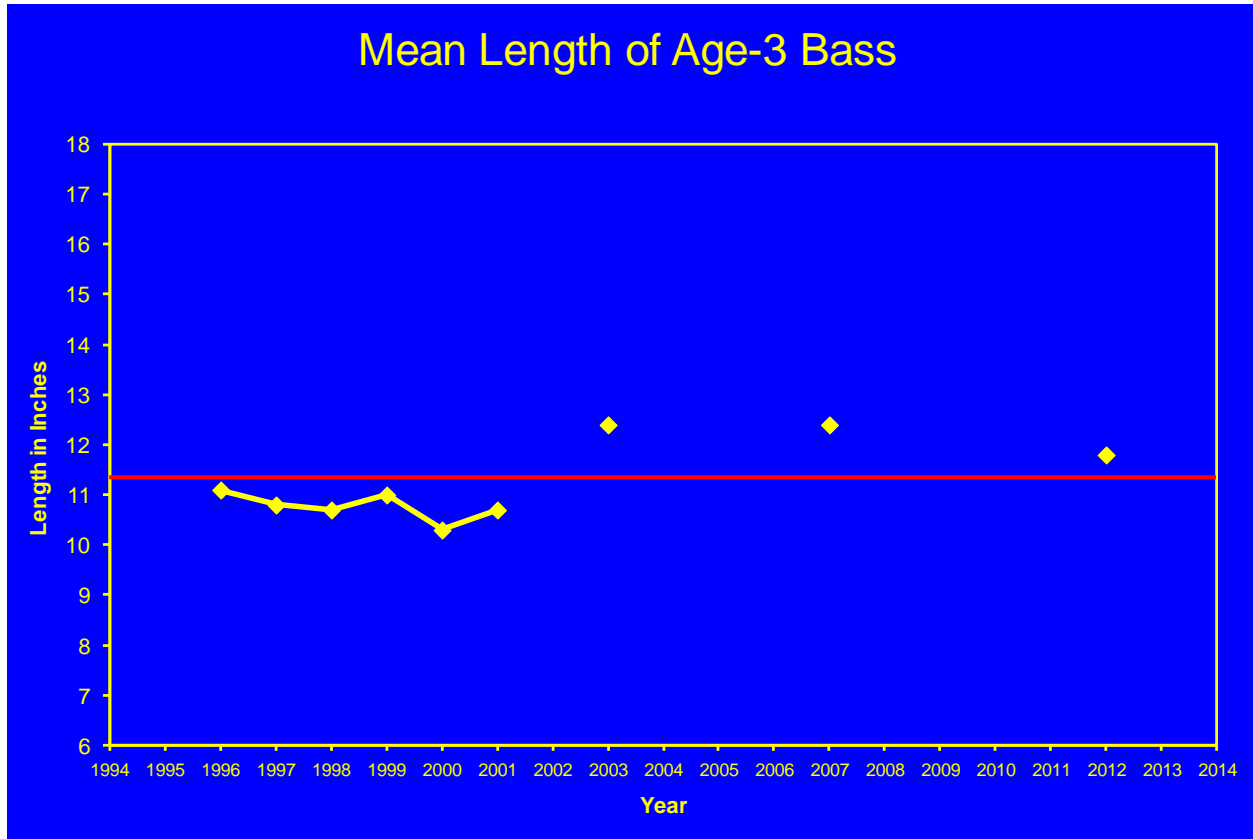
## Cave Run Lake Bass Assessment 2013

Cave Run Lake is an 8,270 acre US Army Corps of Engineers reservoir on the mainstem Licking River located in Bath, Menifee, Morgan and Rowan counties and is mostly surrounded by the Daniel Boone National Forest. Impounded in the early 70's, this lake is a popular destination for those anglers fishing for largemouth bass, muskie, crappie, bluegill, white bass, channel and flathead catfish. The following graphs show trends and rankings for each of the five population parameters used in the largemouth bass assessment. Please see "Understanding the Largemouth Bass Assessment" article for an explanation of how the assessment works. *Please note there is a 13.0-16.0 inch protective slot limit on largemouth bass which has been in effect since 1996.* In 1998, 2002, 2009, 2010 and 2011 adverse water conditions made sampling unfeasible; therefore, data is not presented for those years.



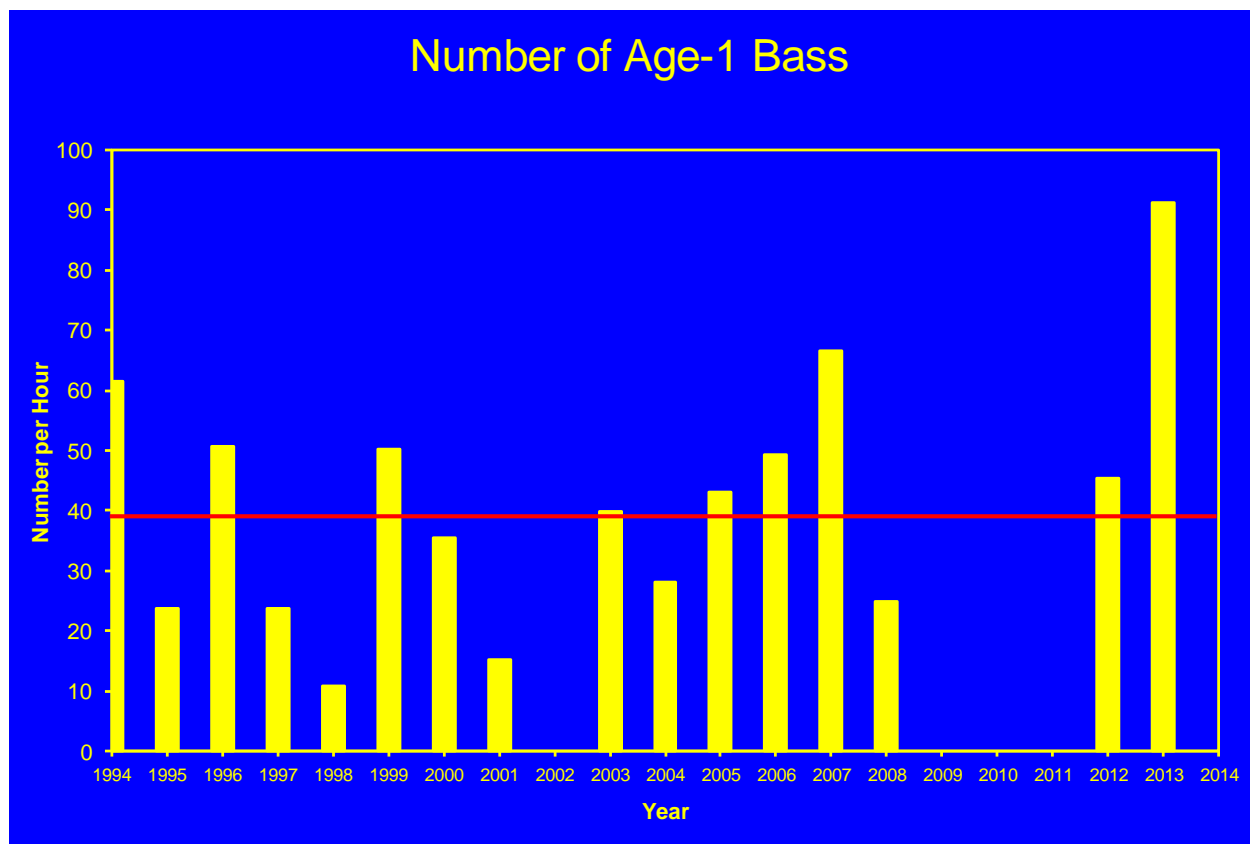
## Parameter 1 – Length at age-3 (growth rate)

At Cave Run Lake, the length of an age-3 largemouth bass has averaged 11.24 inches since 1996 (represented by the red line). When compared to other lakes of this size, this is considered to be fair growth for largemouth bass. The last three largemouth bass age samples at Cave Run Lake have show above average growth to age-3. Growth rates are generally related to factors such as population density, food resources, lake fertility and weather patterns.



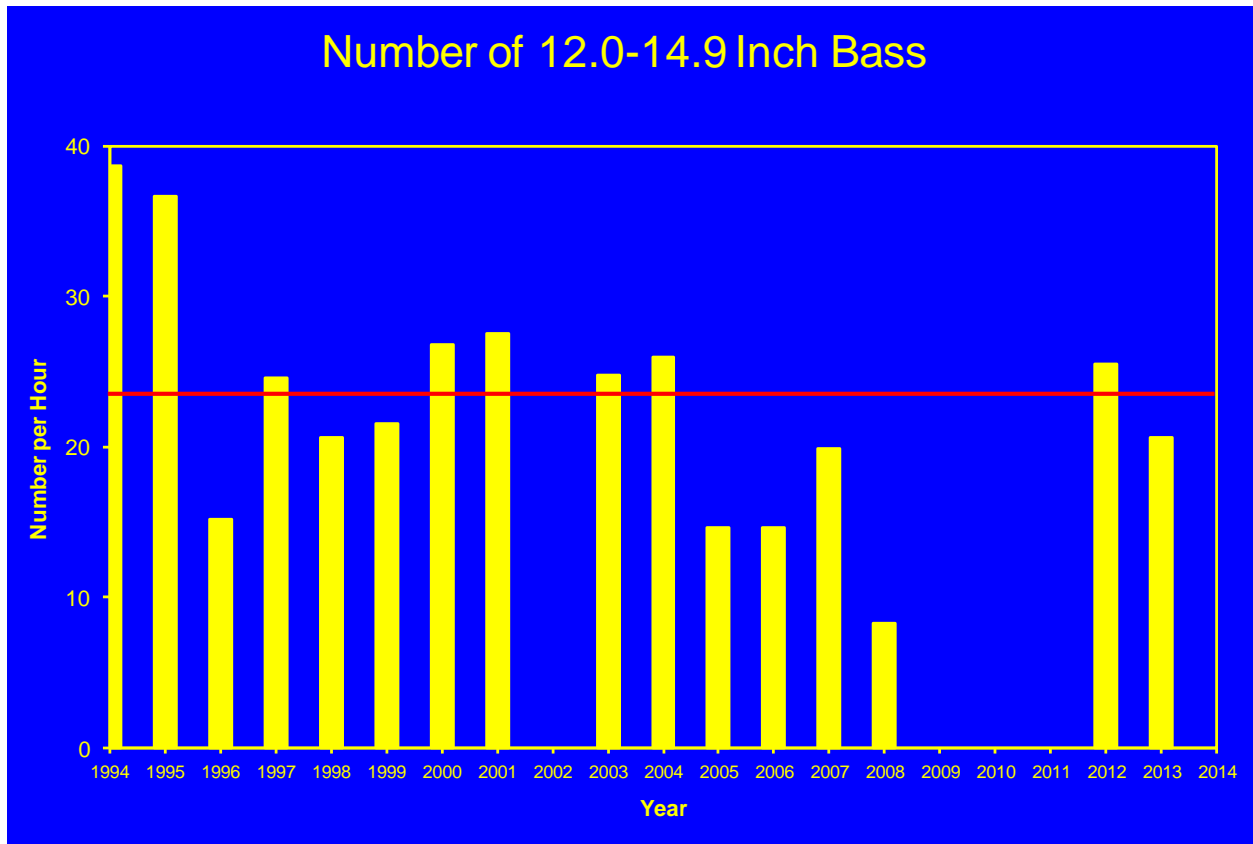
## Parameter 2 – Numbers of age-1 bass (how good the spawn was)

KDFWR looks at the electrofishing catch rates of age-1 largemouth bass to assess the success of the spawn which occurred in the prior year. This is an important parameter because the number of age-1 bass produced represents how good the fishing will be once these fish grow large enough for anglers to catch. At Cave Run Lake, age-1 largemouth bass catch rates have averaged 39.89 fish per hour (f/h) of electrofishing since 1990. When compared to other lakes of similar size, this is considered to be a good age-1 catch rate. From 2004 to 2007, the catch rate increased steadily, but dropped in 2008. This drop was most likely due to a malfunctioning electrofishing boat and in 2012 and 2013 the catch rate was back above average. For the most part, spawning success has been variable through this 23 year period, but in poor spawn years, KDFWR may stock fingerling largemouth bass to make up for any possible shortcomings.



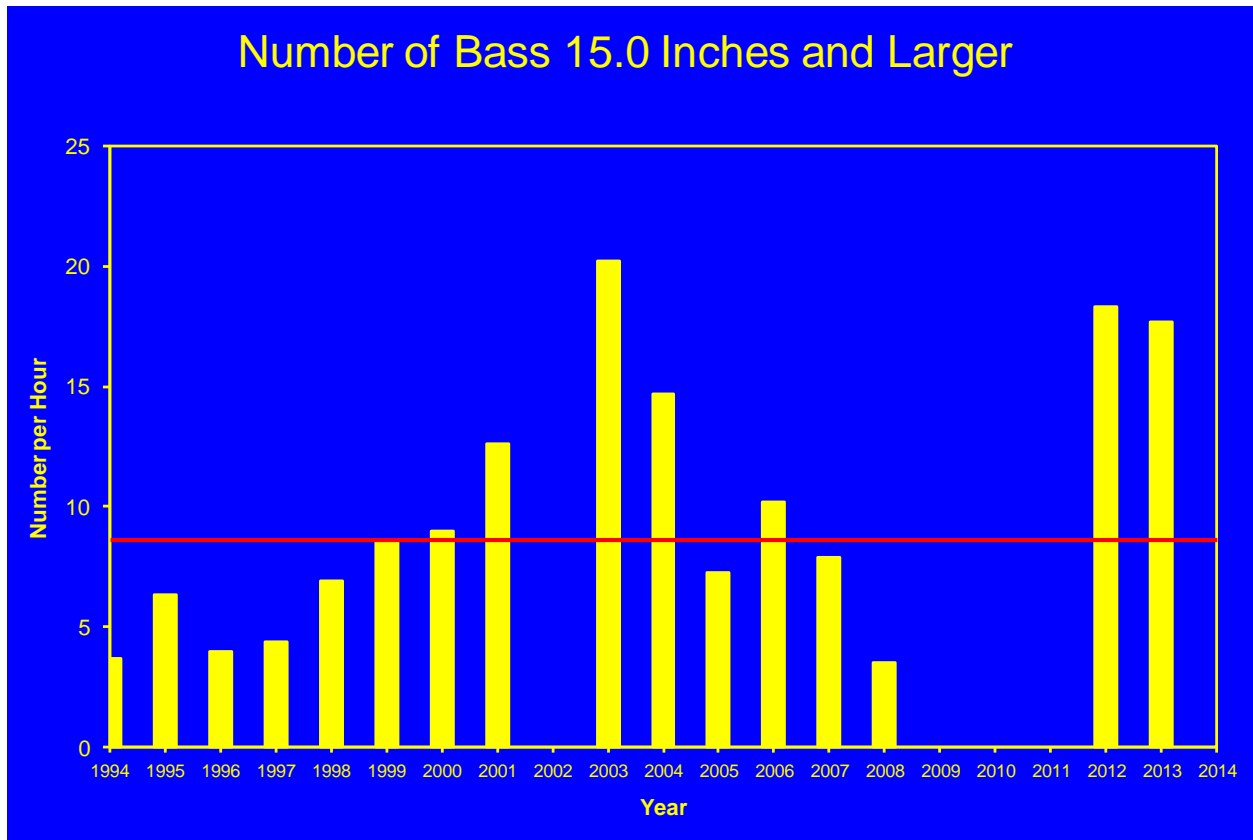
### Parameter 3 – Numbers of 12.0-14.9 inch bass

The electrofishing catch rate of 12.0-14.9 inch largemouth bass has averaged 23.70 f/h since 1990, which gives Cave Run Lake a fair rating when compared to other lakes of similar size. Catch rates for this category can be deceiving when compared to lakes which have a 15.0-inch minimum size limit. The slot limit on Cave Run Lake allows some fish in this category (from 12.0-12.9 inches) to be harvested. In fact, you can see a dramatic drop in 1996, when the slot limit went into effect. The point of the slot limit is to reduce some of the over-crowded smaller fish to help with growth to larger sizes.



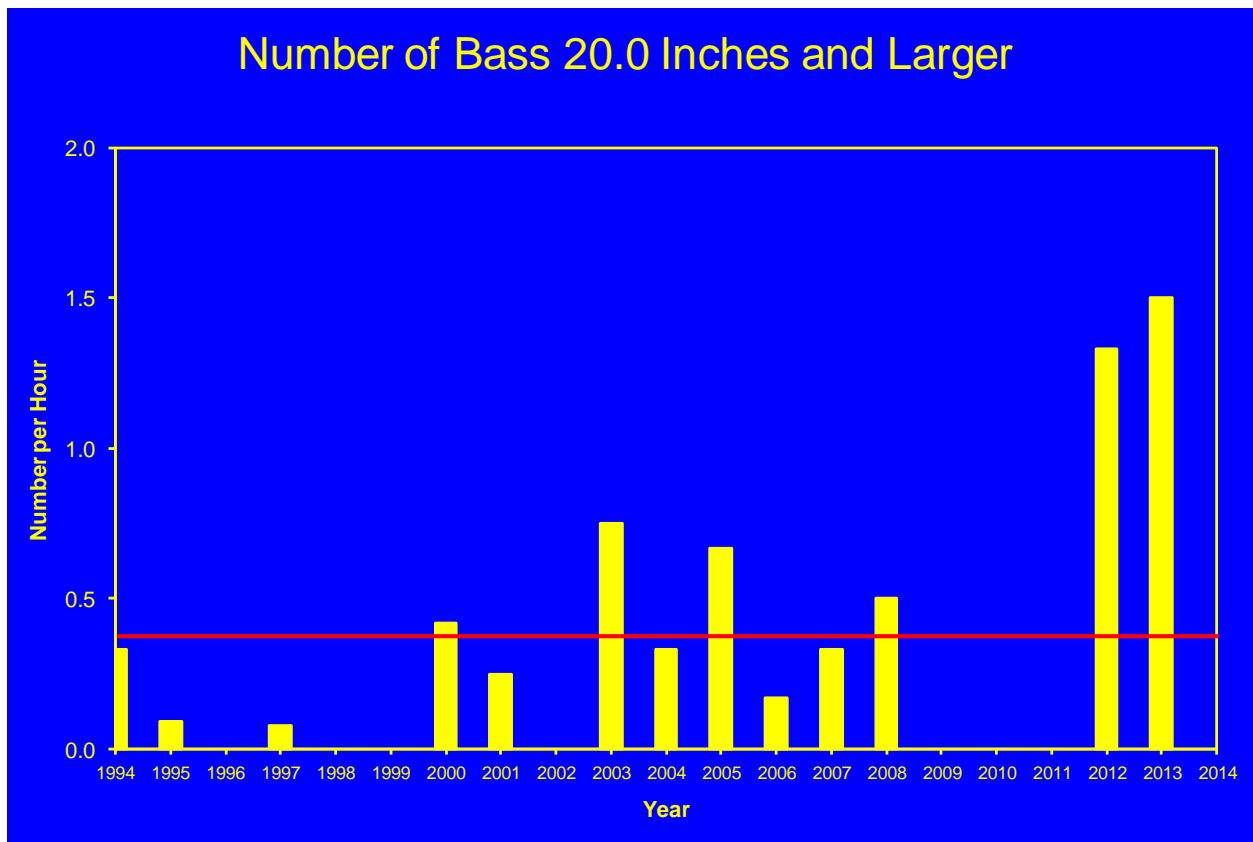
## Parameter 4 – Numbers of 15.0 inch and larger bass

The catch rate of 15.0 inch and larger largemouth bass at Cave Run has averaged 8.64 f/h since 1990. When compared to other lakes of similar size, this is a fair catch rate for this size category. Catch rates rose from 1996 – 2003, but then declined from 2003 – 2008. Catch rates in 2012 and 2013 have rebounded back to highs seen in 2003 and 2004.



## Parameter 5 – Numbers of 20.0-inch and larger bass

The electrofishing catch rate for 20.0 inch and larger largemouth bass has averaged 0.39 f/h since 1990. This catch rate gives the lake a fair rating when compared to other lakes of similar size. Catch rates for this size group have held fairly steady around the lake average through the years, but beginning in 2012 and continuing in 2013, catch rates continue to set new records at the lake and have more than doubled the average catch rates experienced historically. The opportunity to catch an occasional trophy size largemouth bass should be very good in the next few years.



### Overall – Total Assessment Score (All five parameters added together)

Overall, the largemouth bass fishery at Cave Run Lake has averaged a fair rating of 11 since 1990 when compared to other lakes of similar size. The largemouth bass population has only been rated “good” during 6 of the 20 years the population has been assessed. However, five out of the six good years occurred after the inception of the 13.0-16.0 inch protective slot limit.

